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1914

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The Maryland Agricultural College Bulletin

"Official pub.

SHORT COURSES

IN

AGRICULTURE,
HORTICULTURE,
POULTRY HUSBANDRY,
DOMESTIC SCIENCE,

JANUARY 5TH TO MARCH 14TH, 1914.

ISSUED QUARTERLY BY THE
MARYLAND AGRICULTURAL COLLEGE,
COLLEGE PARK, MD.

Entered at College Park, Md., as Second Class under Act of Congress,
July 16, 1894.

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MARYLAND'S POSSIBILITIES

The net return from her 50,000 farms should be doubled.

Her two millions of acres of uncultivated and swamp land could be increased in value tenfold.

Her average yield of corn could be increased two barrels per acre, and this would give to the farmers nearly four million dollars more per year.

One pint more milk per cow per day would give the dairymen over one million dollars more for their labor each year.

Unused hill land could be turned into pastures that would feed at least a half million sheep.

Maryland can be made the greatest fruit State in the East. Land suitable for orchard fruits that now sells for $10 to $30 per acre can be made worth $150 to $300 per acre.

OTHER CROPS CAN BE DEVELOPED PROPORTIONALLY

Maryland's soil, climate and location are exceptionally well fitted for growing food for man. She has ten million consumers in the cities and towns located at her doors.

NO STATE IN THE UNION HAS AS GOOD MARKETS

The consumers should pay less for food and the producers get more for their products than at present. Co-operation between buyer and seller will make this possible.

More profit in farming will attract settlers and increase land values.

The water-power that is going to waste on thousands of Maryland farms should be harnessed and made to lighten and do much of the farm labor.

Maryland should rank first as a state of prosperous farms and pleasant homes.

Her 200,000 growing boys and girls are entitled to as good educational facilities as other States provide for their children. They should be trained to make the most of these possibilities.

The first-class equipment of your Agricultural College for education, investigation and the demonstration of these possibilities would be the greatest factor the State could have for bringing about these desired results.

LET US HAVE A GREATER STATE THROUGH A GREATER AGRICULTURE, AND A GREATER AGRICULTURE THROUGH A GREATER AGRICULTURAL COLLEGE.

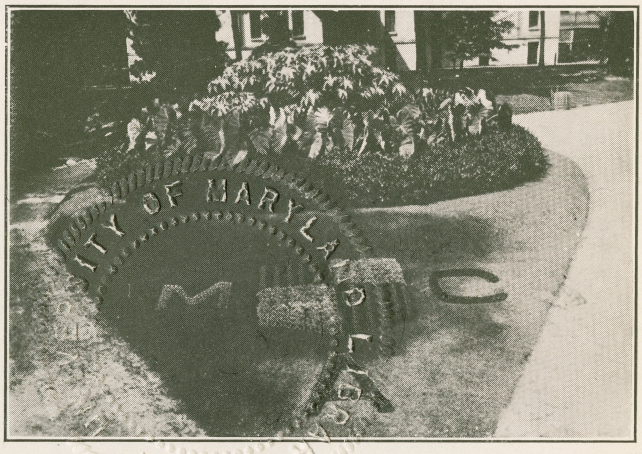
Welcome

To Your Agricultural College

"The trained man will lead in all great enterprises. I would advise every young man if possible to obtain a college education, a SHORT COURSE, if nothing more, to gain the college spirit."—Collingwood.

YOU are cordially invited to attend the free short courses offered this winter at your Agricultural College for busy farm men and women. These courses are on the subjects of Farm Crops, Soil Fertility, Live Stock Management, Dairying, Farm Mechanics, Fruit Growing, Vegetable Gardening, Poultry Keeping and Domestic Science.

As instructors in these subjects, the College has, beside its regular teaching force, a considerable number of practical experts from Maryland and adjoining States who have made a pronounced success of their specialties.



Welcome To Your Agricultural College

This gives to the Maryland farmer, his wife and grown boys and girls an unequaled opportunity for securing in a nut shell of cost and time, the *meat* of practical experience and up-to-date methods in the various kinds of farming and home-making in which they are especially interested. The knowledge thus gained is intended to be put to immediate use in the work of the farm and home, lessening its drudgery and increasing its returns. No investment is likely to prove more worth while to you in yielding profits throughout the entire year than a winter's vacation spent, by yourself

or some member of your family, in attending one or more of these short courses.

No farmers are more loyal to their Agricultural College, or more appreciative of the advantage she offers, than those who, as students, have taken her short courses. To them is given a great opportunity for making known to their friends and neighbors the mission of the Agricultural College, which is to see that no furrow is left unturned or neighborhood left unvisited, that is capable of greater production or a fuller life.

Additional information and copies of this booklet for distribution will be gladly furnished you on request.

H. J. Patterson

President.

College Park, Md.

On Your Way

Short Courses, 1914

Soil and Fertilizers	January	5-10.
Farm Crops	"	12-17
Domestic Science	"	12-17.
Poultry Husbandry	"	19-24.
Horticulture	"	26-February 7.
Animal Husbandry	February	9-28.
Farm Machinery and Farm Engines	March	2-7.
Farm Carpentry and Blacksmithing	"	9-14.

Location and Connections

The Maryland Agricultural College is located at College Park, on the Baltimore and Ohio Railroad, between Baltimore and Washington, forty minutes by trolley from the United States Department of Agriculture, the Congressional Library, and the Government Experiment Farms.

Short Course Headquarters

Adjoining the College grounds are the Agricultural Experiment Station and Farm. Here, in the Biological Laboratory Building, are located the headquarters for the Short Courses, the main lecture hall, and a demonstration room for killing, dressing, packing, etc. These rooms are floored with cement, and are commodious enough to allow of machinery, stock, etc., being brought in for study and examination, regardless of weather conditions.

Class Rooms

The lecture rooms, laboratories and new greenhouses of the College are offered freely for the use of short-course students, as guests of the College and the regular student body.

Library and Reading-room

The College library is open daily, and students are encouraged to consult books bearing upon their subjects of study. The privileges of the College reading-room are also extended to them.

Dairy Barn

A complete set of dairy barns, housing a fine herd of pure-bred Ayrshires and Guernseys, demonstrates the latest methods of dairy management. Especial attention is invited to the valuable features of the Open Dairy Barn, original with our Experiment Station.

Accommodations and Cost

Instruction is free. Board may be had in College Park, or in the adjoining trolley-connected towns of Hyattsville, Riverdale or Berwyn, at about $5.00 a week for board and lodging. All persons planning to attend these courses should write us promptly, so that proper accommodation can be secured.

Dairy Barns

Soils and Manures

January 5 to January 10

W. T. L. Taliaferro
Grover Kinzy

THIS course deals with soils, their properties, and how to care for them and make them more productive and fertile. Their relation to water, air, and heat; their adaptation to various crops; their need for drainage; crop rotation, the proper application of manure, fertilizers, and lime are all discussed.

The presence of bacteria in soils is given attention from the standpoint of soil building. Their relations to the decomposition of organic matter, to the fertility of the soil, to leguminous plants, and to the rotting of manure are explained. In this connection a new soils laboratory gives the student an excellent opportunity to study the physical properties of the different kinds of soils.

Experiment Station Wheat Field

Instruction is given in the home mixing of fertilizers for best results. Every effort is made to direct the student toward ways and means of enriching his soil economically, and managing it to produce profitable crops while improving it.

Farm Crops

January 12 to January 17

W. T. L. Taliaferro
Grover Kinzy

Special Lecturer:
Nickolas Schmitz, Maryland Experiment Station.

FARM crops suited to Maryland conditions, their classification, adaptation to soil and climate, and various methods of culture form the subject matter of this course.

Their relations to the elements contained in the air and soil are discussed. Explanation is given of how a plant feeds, and of the food products it yields. Questions like, "What is my land good for?" "What can it best produce?" are asked and answered as correctly as possible.

Corn and Alfalfa

Attention is given to seed selection, the judging of grains, and the planting of improved varieties. Special lectures are devoted to corn, wheat, oats, alfalfa, clovers and forage crops. The preparation of land for these crops; their cultivation and harvesting, with a view to economical production and the saving of labor waste are taken up thoroughly.

Weeds, their nature and how to get rid of them; insects and diseases affecting farm crops are included. After many years' experience, the farmer may have learned already much of what is taught in this course, but he is sure to find out many things that he does not know, and which he cannot afford to waste time in discovering for himself.

Domestic Science

January 12 to January 17

THE Domestic Science Courses given in previous years have been highly successful in the interest aroused among the women of the State, in the high grade of instruction given, and in the appreciative and ready spirit in which this instruction has been received.

Instructors.

Mrs. E. P. Foulk, Professor of Home Economics, Ohio State University; Dr. Martha B. Lyon, Washington, D. C.; Dr. C. O. Appleman, Maryland Agricultural Experiment Station; Miss Emma L. Jacobs, Director of Domestic Science in the Washington Public Schools, and many others, have been engaged for lectures and practical demonstrations in all branches of housework and home-making.

Subjects of Study.

The Household—The Care of Babies, Bacteriology, Household Chemistry, Home Nursing, Bandaging, Ventilation, Cleaning, the Disposal of Waste, House Furnishing.

The Kitchen—Selecting Meats and Vegetables, Food Values, Care of Milk, Planning Meals, Cutting up Meats, Cooking, Canning of Fruits and Vegetables and the Fireless Cooker.

Clothing—Fibres and Textiles, Sewing and Dress Planning.

Visits will be made to the College Buildings, where we hope to educate your boys and, in the near future, your girls in better farming and home-making; to the Experiment Station and Poultry Plant, where we are engaged in discovering better methods and demonstrating them to our people, and to the Dairy Barns, where we are learning and teaching how to produce the purest of milk for the babies of Maryland, both of country and city.

A Maryland Shepherdess

Note: The College 'bus will each morning meet the 9.00 o'clock trolley from Washington and the 9.10 o'clock trolley from Laurel. In the afternoon the 'bus will carry passengers from the college to meet the 5.10 and 5.30 trolley cars.

The Farm Home

NO HOME can be made brighter or more comfortable than the farm home of Maryland. No woman should be happier than the woman who is daily occupied in creating such a home and in rearing her children in it. She is no longer content to view the outdoors through a darkened kitchen window or to be denied a friendly visit, or possibly a pleasant week or two at her Agricultural College, taking a course that will help her with her chickens or her home duties.

Real Comfort

Give her a chance to stay young. Let her have her chickens, her garden, her flowers. Let her have friends to visit her occasionally and a horse to drive. Let her have a little time for rest. Let her, above all, be happy in her home building. Let her bring air and sunshine into the old farm house. Let her screen it against the discomfort of flies and mosquitoes and the deadly diseases they carry. Let her make it comfortable and beautiful, a place to cling to, and love all through life.

Let us see what can be done. Take our first illustration—"a house." Note its east side—the side that should be open to the morning sun—closed against both light and air. See the old ramshackle fence in the foreground. On the back porch notice the well and buckets that have to be hauled up and lifted. The only redeeming feature is its location under the chestnut trees.

"A House"

See the same house in the second picture—now "a home." Sunshine and air have been let in. A bay window on the first floor has made possible a cosy living room. Two windows upstairs invite pure breathing and early rising. A front porch gives the house a look of welcome and hospitality. The back

porch roof has been removed and a small bathroom built out over it. In this bath-room is a home-made bath-tub and running water. An inexpensive gasoline engine and pump have replaced the old-fashioned well. This engine also runs the washing machine and cream separator. The piping for water was done by the farmer himself with a very simple outfit, and the few hints that he picked up in a farm mechanic's short course. On the edge of the porch is built a dry dirt closet convenient in all kinds of weather, absolutely sanitary, and easily cared for. As a finishing touch, English ivy or ampollopsis, found growing wild on the place, has been trained over the porch and bath-room, and in three years has covered all the space available.

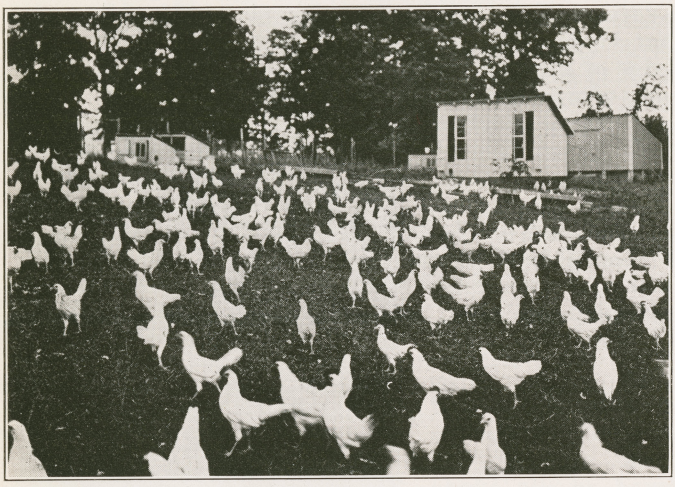
Other changes inside and out have been made from time to time. These have been neither costly nor difficult to bring about. By their help, a woman has made out of this house a bright, cheerful place in which to *live*, as well as to eat and sleep. Did not her education in better home-making pay?

"A Home"

Poultry Husbandry

January 19 to 24

Roy H. Waite.



Maryland Money Makers

This course is designed for the busy poultry keeper now engaged in the business, the beginner, and those who are thinking of taking up chicken raising. It is very obvious that we cannot make finished poultry raisers from novices in the short period of one week, but past experience has shown that those in the above class can be greatly benefited. In fact, the object of the course is not so much to develop poultrymen who can go out and run a poultry plant from the start, but to get the student to thinking for himself.

The poultry keeper who has time and inclination for taking the course will be amply repaid by a review of the subject; new facts of interest will come up, and he will be mingling with an enthusiastic "chicken crowd."

The beginner cannot help but reap a rich harvest of information that will help to save hundreds of dollars that might otherwise be wasted in mistakes or needless experiments to learn facts that are already well known and established.

The course is of especial value to the victim of "chicken fever," who is undecided as to whether or not to enter the field of poultry production. Many persons start in with very erroneous ideas as to the amount of attention required and the profits expected. They are misled by the great stories of success in the business so often told.

Full details of the subjects for discussion and demonstration, together with the special list of poultrymen engaged as teachers, will be found in the poultry course folder, to be had for the asking by all poultry keepers.

Horticulture

January 26th to February 7th

T. B. Symons, Dean.

Assistants:

H. Beckenstrater, E. N. Cory, B. W. Anspon, J. F. Monroe, C. P. Smith, L. E. Burrell

Special Lecturers:

J. B. S. Norton, C. P. Close, W. P. Ballard, F. S. Holmes, T. H. White, and many others.

THE aim of the two-weeks' course in horticulture is to discuss and demonstrate the most practical methods of meeting successfully the various problems which confront the fruit grower, the vegetable gardener, and the owner of the home acre.

Orcharding—Lectures are given on fruit varieties adapted to Maryland's soil, climate and markets, the selection and planting of young trees, the cultivation and feeding of the growing orchard, the protection of both the trees and their fruit against insects, pests and diseases. Special talks are given by practical authorities on apples, pears, peaches, plums, cherries and bush fruits. Their picking, packing and methods of marketing are given much attention, as being quite as important as their successful production.

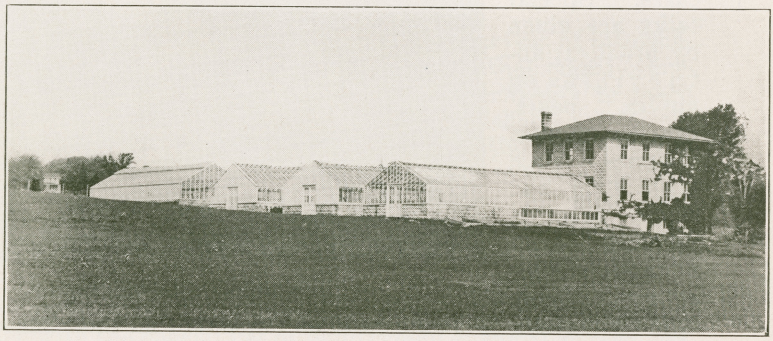
Maryland Week Exhibition

Students Pruning

Vegetable Gardening—The second week is largely occupied with seed selection, and the preparation of the seed bed for vegetables. The truck crops, such as potatoes, sweet corn, tomatoes, peas, cabbage, etc., are treated separately by experienced growers.

Demonstrations are a strong feature of this course. Much time is given to the illustration of methods of budding, grafting and pruning; of spraying and the preparation of insecticides and fungicides; of the grading and packing of fruit; cold-frame and hot-bed construction are also taken up.

The Home Acre—Its needs and possibilities in cutting down the living expenses of both farmer and suburbanite are given especial consideration. The home orchard and garden should be given the first attention over any other part of the farm. The home surroundings should be made beautiful and attractive. Not only should the home acre be developed on every farm, but wherever there is a house and a piece of ground there should be a garden and fruit trees. In the "backyard farms" of the outlying districts and suburbs of our towns and cities lies great hope for better living conditions, and healthier and happier children.



Experiment Station Greenhouses

Farm Live Stock

February 9 to February 21

R. H. Ruffner,

S. S. Buckley, Veterinarian.

Assistants in Sheep and Swine:

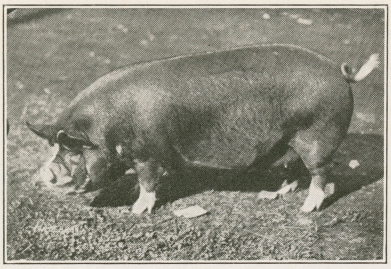
C. L. Opperman, R. S. Allen, Reuben Brigham.

THE course in farm live stock is especially planned for those who wish to raise superior live stock with economy and success. The best farming requires the keeping of farm animals, and the amount of profit obtained is directly proportionate to the number of animals kept and the degree of attention they are given. We believe, therefore, that every legitimate means of encouragement should be brought to bear upon the Maryland farmer in making Maryland a State noted for her live stock interests, and the breeding of her own high-class strains of farm animals.

A Busy Day

With this end in mind, we offer as a part of this course the study of breeds, the judging of horses and cattle for soundness, condition and type, and the general principles of live stock breeding.

Thousands of dollars are spent by Maryland farmers each year in the unnecessary purchase of expensive feeds. Special emphasis is laid on the economical and rational feeding of all farm animals. Instruction is given in working out balanced rations from feeds available on individual farms and in different localities.



A Happy Porker

We endeavor to teach each student how to buy a good feeder. Fat cattle, hogs and lambs will be slaughtered for market in our large demonstration room. The more profitable marketing of fattened stock and the selection and handling of meats for home and neighborhood consumption will be touched upon.

The hot-house lamb industry, its present standing and possibilities for development in many sections of Maryland, will be featured. To this end the services of two experienced growers of winter lambs have been secured, and their experience should prove most interesting to prospective sheep owners.

Students will have an opportunity to inspect the anti-hog cholera serum plant at the Experiment Station. A demonstration of the serum treatment will be included in the work of the course.

Bred from Our Herd

Maryland Boys Judging at Chicago

Dairying

February 21 to February 28

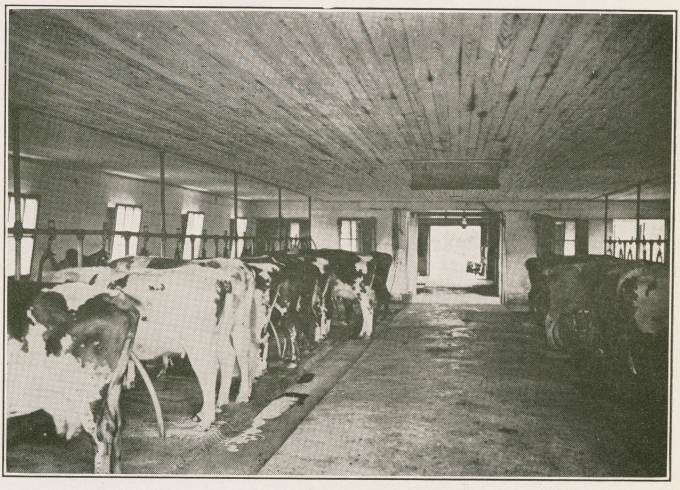
R. H. Ruffner,
S. S. Buckley, Verterinarian.

Experiment Station Assistant:
G. E. Wolcott, Dairy Extension.

THE dairy industry in Maryland is of much greater magnitude than is apparent to the average observer. The most reliable figures available at the present time place the total number of dairy cows in Maryland at 166,859, with a farm value of more than $6,000,000. This represents more investment than all the meat cattle of the State, together with its hogs and sheep. It is an industry that tends to intensify farming methods. It is one of the factors which enters most strongly into the great question of conserving soil fertility.

There are two directions in which much improvement can be made, namely, in raising the annual production of our cows and in improving the quality of our dairy products. The first is the more important. Could the annual product of the Maryland cow be advanced a few pounds of milk or butter per year, it would bring greatly increased returns to our producers.

Certain sections of Maryland are well fitted for dairying, and in such localities the industry should be encouraged as much as possible.



Our Dairy Herd

During the brief time allowed for dairy instruction, the following subjects will be discussed: the judging of dairy cows, dairy breeds and types, co-operative breeding and testing, the building of silos, feeding for economic production, types of dairy barns, dairy sanitation, effects of dairying on the soil. Excursions will be made to the Government Breeding Farm, at Beltsville, and to the Soldiers' Home Dairy, Washington, D. C.

Farm Machinery and Engines

March 2 to March 7

W. T. L. Taliaferro.

THE study of farm machinery and motors in this course is intended to familiarize the student with the construction and use of various implements and machines required in meeting modern farm conditions and in solving the labor problem. The gasoline engine and its adaptability to a wide variety of service will be thoroughly demonstrated.

Carpentry, Blacksmithing, Pipe Fitting

March 9 to March 14

Harry Gwinner, H. L. Crisp.

This is a most valuable course for the average farmer. He can save much by sharpening and fitting his own tools, and by knowing when this work has been done properly.

Carpentry—A handy thing for the farmer to have is the ability to plan and construct his sheds, outbuildings, and the many appliances about the farm that need to be kept in repair.

Forging—A small forge, and the knowledge necessary to do some of his own iron work at odd times, such as making open links, chain welds or temporary machine repairs is often worth a great deal. Many a farmer in one of his rush seasons has had to lose three or four hours of the best part of his working day in making a hurried trip to the nearest blacksmith shop, wasting both time and money.

Pipe Fitting—Knowing how to lay pipe and make sound connections is something that every enterprising farmer will find of use in supplying the house, barns and garden with water.

Doing It Right

Editorial from the Rural New Yorker, August 30th, 1913:

Several of the agricultural colleges are issuing very striking advertising in the way of pamphlets and cards. The Maryland College, following Colorado, prints on a card with other facts about the College:

MARYLAND WILL NEED IN THE NEXT TEN YEARS

50,000	Successful Farmers.
10,000	Live Stock Breeders.
10,000	Orchardists and Fruit Growers.
2,000	Expert Dairymen.
1,000	Mechanical Engineers.
500	Civil Engineers.
500	Highway Engineers.
500	Electrical Engineers.
200	Agricultural Engineers.
300	Chemists.
300	Teachers of Agriculture.
1,000	Science Teachers.
300	Teachers of Manual Training.
300	Travelling Inspectors.
150	Experiment Station Workers.
150	Field Demonstrators.
100	Foresters.

Why not fit yourself for one of these positions?

It is true that Maryland will need every one of the 77,300 persons here mentioned, and more besides. Each one of those trained men should also be a good citizen, with unselfish views of public life, willingness to work with his hands, if need be, and able to realize that the common people paid for his education, and thus represent his creditor. Does the college turn out such men? The Maryland farmer who writes the following evidently does not think so:

> Agricultural college lads only do head work. I have tried them and they always fail. These colleges are for the production of millionaire's menials.

This man is wrong in this sweeping statement. We know many college graduates who are doing sensible and practical work on the farm. It is true that there are some "millionaire's menials" who received their training at the agricultural colleges. Every college turns out a proportion of graduates who go about as very poor advertisements for the institution. If we condemn the college for its poorer samples, we should also give it credit for its high-grade goods. We have faith in our agricultural colleges, for sooner or later OUR WORKING FARMERS WILL LEARN HOW TO CONTROL THEM, AND MAKE THEM DO THE WORK WHICH IS REQUIRED.

FARMER BOY OR GIRL, SUCCEED!

BE A LEADER IN YOUR NEIGHBORHOOD.

Make the best money earned today by fitting yourself as a well-paid producer on your home farm. Your profession demands a live, up-to-date business education. Spend your winter vacation with practical and paying results. Attend the *free* short courses in dairying, fruit growing, poultry keeping, home making, and better farming at

YOUR AGRICULTURAL COLLEGE,

COLLEGE PARK, MD.

1914 Short Courses, January 5 to March 14.